

**Decision Notice &
Finding of No Significant Impact
Restoration of Dry Forest Communities on the South Zone
of the Cherokee National Forest**

USDA Forest Service

Tellico Ranger District, Cherokee National Forest
Ocoee/Hiwassee Ranger District, Cherokee National Forest
Monroe, McMinn, and Polk County, Tennessee

Decision and Reasons for the Decision

Background

The Tellico and Ocoee/Hiwassee Ranger Districts prepared an Environmental Assessment that documents the analysis of an action alternative that will programmatically implement the Cherokee National Forest (CNF) 2004 Revised Land and Resource Management Plan (RLRMP). The need for action is to address restoration goals and objectives from the RLRMP as they apply to approximately 62,000 acres of dry forest communities of the south zone. These plant communities, Shortleaf-Pine-Oak Forest, Pine-Oak Heath Woodland, Dry-Mesic Oak-Hickory Forest, and Dry Oak-Heath Forest and Woodland are defined in the final report from the south zone collaborative (The Nature Conservancy 2018). If no management action is taken and off-site vegetation (primarily white pine and Virginia pine) continues to expand into habitats where they are not ecologically appropriate, the desired species composition of these communities would continue to decline. With the decline, resiliency to disturbances including insect and disease, fire, and variations in climate would be reduced making this dry forest community more vulnerable to a wide array of stressors. The proliferation of white and Virginia pine is potentially affecting other resources, including many wildlife species that depend on natural plant communities. Natural fire has been suppressed for decades in many dry forest communities. There is a need to re-establish the use of fire in this fire-adapted landscape to restore and maintain native plant communities. In order to move towards ecological desired conditions, there is a need for a complete suite of management tools (mechanical, chemical, prescribed fire) to be available to address the variety of conditions that occur on the landscape, including the need for adequate access to potential treatment areas.

The CNF has worked with the public and a collaborative group of interested parties over a two-year period to define the purpose and need, the proposed action, and the scientific information that is most relevant for this landscape. The EA and supporting documents are available for public review at the Tellico and Ocoee/Hiwassee Ranger

Stations and on the Forest web site at

<http://www.fs.usda.gov/projects/cherokee/landmanagement/projects>.

Decision

Unlike other analyses that result in a decision that implements specific actions on the ground, this decision is programmatic in nature. Thus, this analysis and decision will identify ecological desired conditions, propose a suite of actions that could be taken when various conditions exist within a stand, and identify additional criteria or design elements that should be applied to specific actions.

This programmatic decision will not authorize any site-specific (ground-disturbing) action that can be implemented. Additional environmental analyses (environmental assessments or categorical exclusions) that tier to and incorporate by reference this programmatic analysis will need to be developed and a new decision(s) issued prior to any implementation. This approach is consistent with the 2014 guidance provided by the Council of Environmental Quality (CEQ 2014).

Inherent within a programmatic EA approach is the assurance that necessary site specific surveys would be conducted within forested stands proposed for treatment, to avoid, minimize or mitigate impacts to cultural or archeological resources; threatened, endangered, or sensitive species; steep slopes and erodible soils; scenic values; and potential for the spread of invasive species.

This programmatic decision allows for approximately 62,000 acres of white and Virginia pine to be treated across the 300,000-acre landscape once a site-specific NEPA analysis and decision has been issued. This decision approves the following actions:

- Utilize a suite of silvicultural activities including both commercial and non-commercial vegetation treatments and site preparation for natural vegetation regeneration and planting as disclosed in the following table:

Proposed Silvicultural Treatments to be used to Achieve Restoration Goals

Treatment Type	Tree Retention	Description of Activity
Stand Clearcut	0 BA/A	An even-aged regeneration or harvest method that removes all trees in the stand producing a fully exposed microclimate for the development of a new age class in one entry.
Seedtree Preparatory Cut	80% total BA/A	An optional cut to enhance conditions for seed production and/or develop wind-firmness for a future seedtree establishment cut.

Proposed Silvicultural Treatments to be used to Achieve Restoration Goals

Seedtree Establishment Cut	10-20 BA/A	A type of cut that removes trees except those needed for the purpose of seed production. Prepares the seed bed and creates a new age class in a moderated microenvironment. Additional trees may be retained to provide a minor (less than approximately 10% of full stocking) live component after the removal cut, for reasons other than regeneration.
Seedtree Final Cut	0-10 BA/A	A final removal cut that releases established regeneration from competition with the overwood after it is no longer needed for seed under the Seedtree regeneration method.
Commercial Thinning	40-80 BA/A	An intermediate harvest with the objective of reducing stand density primarily to improve growth, enhance forest health, and other resources objectives. Treatment can recover potential mortality while producing merchantable material.
Pre-commercial Thinning	60-100 BA/A	The cutting of trees not for immediate financial return but to reduce stocking.
Prescribed Burn	Site Specific	Use of prescribed fire for ecological restoration
Site Preparation for Planting		
Manual	Site Specific	Manipulation of a site using manual methods (chainsaws, machetes, etc.) to enhance the success of regeneration on sites that will be planted.
Chemical	Site Specific	Manipulation of a site using chemical methods (listed in herbicide use recommendations above) to enhance the success of regeneration on sites that will be planted.
Burn	Site Specific	Manipulation of a site by prescribed burning to enhance the success of regeneration on sites that will be planted.
Site Preparation for Natural Regeneration		
Manual	Site Specific	Manipulation of a site by using manual methods (chainsaws, machetes, etc.) to enhance the success of natural regeneration
Chemical	Site Specific	Manipulation of a site by using chemical methods (listed in herbicide use recommendations above) to enhance the success of natural regeneration
Burn	Site Specific	Manipulation of a site by prescribed burning to enhance the success of natural regeneration

Proposed Silvicultural Treatments to be used to Achieve Restoration Goals

Additional Activities		
Plant Trees	Site Specific	The establishment or re-establishment of forest cover artificially by planting seedlings and/or cuttings with or without site preparation.
Tree Release and Weed	Site Specific	A treatment designed to free young trees from undesirable, competing vegetation. Includes cleaning and weeding which is done in stands not past sapling stage.
Improvement Cut	Site Specific	An intermediate harvest which removes the less desirable trees of any species in a stand of poles or larger trees, primarily to improve the composition and quality.

- Utilize prescribed fire to create and maintain desired conditions and the use of fire to enhance the success of regeneration on sites that require planting. In situations where the off-site pines are encroaching into the understory of an otherwise diverse and characteristic dry forest community, preference should be given to the use of prescribed fire. Fire would be used at its ecologically appropriate intensity, duration, frequency and spatial extent. Containment lines would be preferentially determined using existing roads, streams, and other natural and man-made features to minimize additional ground disturbance (dozer lines).
- Utilize herbicides for restoration purposes that are for a targeted species and are applied in a targeted manner. Herbicide use is most beneficial where prescribed fire or mechanical treatments alone cannot meet the desired objective. It may also be beneficial in conjunction with other treatments. A suite of herbicides would be used to prepare or manage a site that has been treated to remove “offsite pine species” and promote desirable native species composition.
- All herbicides and surfactants would be used in accordance with label requirements and Revised Land and Resource Management Plan standards. Chemical treatments could include streamline basal bark, hack and squirt, cut stem surface, or foliar spray methodologies. Active ingredients that have been approved for Forest Service use include but are not limited to glyphosate, triclopyr, and imazapyr.
- To provide adequate access to treatments and conduct reconstruction on national forest system roads, temporary roads [Forest Service Manual (FSM) 7700, zero code] would be constructed as necessary.

Future analysis and decisions will use the following project design elements to ensure this decision is implemented at the site-specific level as intended:

<i>Roads</i>
Temporary roads would be limited to 1/2 mile each for each unit. After use, all temp roads would be managed following Revised Land and Resource Management Plan standards and state Best Management Practices. (The road prism would likely remain on the landscape until such a time as site specific analysis suggests otherwise)
Any temporary road constructed in an area identified in the <i>Tennessee Mountain Treasures</i> (Irwin 1996) beyond ¼ mile would be re-contoured. These areas are not given any special designation in the Revised Land and Resource Management Plan.
Skid trails and temporary roads for the purpose of timber harvest would not be constructed for sustained distances over 200 feet in areas with slopes of 40% or greater ("steep area"). The 200-foot length can be exceeded however where the skid trail and/or temporary road is needed to traverse a steep area in order to access the remaining harvest unit(s).
Reconstruction of National Forest System Roads would be allowed unless it changes the road management objective.
<i>Soil</i>
Ground based mechanical treatments on slopes equal to or less than 35% will be covered by this programmatic analysis. Operations on slopes greater than 35% should be considered a special circumstance and will require additional, site specific analysis.
During survival checks, the timber staff also evaluates the effectiveness of Best Management Practices implementation on skid roads, landings, and temporary haul roads. If deficiencies are found, they are addressed with appropriate corrective measures which may include the following: seed, straw, fertilizer, mulch, matting, slash, tops, and others.
Different seed mixes are used depending on soil type, steepness, time of year, and other factors. Generally, annual grains are used.
Unacceptable ruts created on skid roads or log landings during harvesting operations are smoothed out, water is diverted appropriately, and erosion is thusly limited.
If rutting occurs within the unit (off of skid trails), operations are halted by the sale administrator until soil moisture conditions improve.
Ground cover shall be applied to all bladed areas with greater than 12% slope on any of the Soils of Concern (SOC) map units as part of erosion control. Ground cover may include mulch, logging slash, natural leaf-fall, etc. These areas would also have drainage controls installed before closure.

<i>Fire Lines</i>
Remove or reduce thinning slash within up to 100 feet of prescribed burn dozer lines or hand lines, dependent upon line type and topographical considerations such as whether a line is mid-slope or on flat ground
Fell trees away from roads slated to be utilized as prescribed burn lines.
Activity fuels should also be slashed down to less than 2 feet above ground level to create a buffer zone of reduced fire behavior within up to 100 feet of roads utilized as prescribed burn lines.
Remove or reduce thinning slash within up to 100 feet of private property boundaries.
Mid-slope line should be avoided due to fire spotting and firebrand rollout concerns; ridgetops or drainage bottoms are preferred line locations.
<i>Non-native Invasive Plant Species</i>
Inventory for non-native invasive plant species in and around proposed projects before initiating ground disturbing activities or burning.
When found, treat infestations of species that have the ability to spread rapidly either vegetatively or through seed, or that are known to increase with fire.
Require that heavy equipment be washed and weed-free before being brought to the forest (Contract Clause BT6.35)
If known that work will occur in both weed-free and weed infested areas, work in weed-free sites first to minimize potential movement on equipment and vehicles.
Include identification/detection of weed species in post burn monitoring.
Revegetate disturbed areas with locally adapted native species when appropriate.
<i>Aquatic Species</i>
Streamside filter zone extended to 300 feet on either side for all threatened, endangered or proposed species (T&E) critical habitat and occupied habitat. Additionally tributaries that feed into critical/occupied habitat also buffered by 300 feet on either side extending from the confluence of the affected habitat, upstream one half mile. The activities restricted in the aquatic threatened and endangered extended buffer zone: road construction, mechanical vegetation treatments, skid trails, log landings, bladed or hand firelines, and prescribed fire.
<i>Indiana and Northern long-eared bats</i>
The January 2015 Indiana Bat Biological Opinion (BO) contains Reasonable and Prudent Measures and Terms and Conditions that are part of the Proposed Action. The January 2016 Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-Eared Bat and Activities Excepted from Take Prohibitions is part of the Proposed Action.

Trails and Recreation

Where needed, vegetation or woody materials will be retained or deposited to inhibit creation of undesired routes used by visitors or to protect/screen sensitive resources.

During the planning stage of vegetation treatment work or projects, consult with the Forest Recreation Manager and District Recreation Manager where treatment work may occur in recreation sites or along trails to ensure that recreation management objectives and standards are met in the Cherokee National Forest Revised Land and Resource Management Plan , Forest Service Handbook 2309.18 (Trails Management Handbook), Forest Service Handbook 2309.13 (Planning and Design of Developed Recreation Sites and Facilities), and Forest Service Manual 2330 (Publicly Managed Recreation Opportunities).

If Forest Service System trails or Forest Service recreation sites are damaged during treatment work, the trail or recreation site will be restored to Forest Service required specifications and standards in Forest Service Handbook 2309.18 (Trails Management Handbook), Forest Service Handbook 2309.13 (Planning and Design of Developed Recreation Sites and Facilities), and Forest Service Manual 2330 (Publicly Managed Recreation Opportunities).

Design elements in Appendix 3, "Scenery Treatment Guide - Southern Regional National Forests," would be implemented as practicable in project design to achieve the appropriate levels of scenic integrity as described in the Revised Land and Resource Management Plan .

Monitoring associated with this decision

In order to ensure that each restoration project is successful, the following monitoring should be included in subsequent site specific proposals:

1. Clear goals and measurable objectives for achieving ecosystem structure and composition.
2. Project level monitoring to measure whether, and to what extent, those objectives are achieved.

Reasons for the Decision

This decision gives future site-specific analyses a suite of management tools (mechanical, chemical, prescribed fire) to be available to address the variety of conditions that occur on the landscape, including the need for adequate access to potential treatment areas to move towards ecological desired conditions.

Restoration should be driven by ecological factors and landscape position. The restoration of vegetation to its ecological potential has many benefits, including wildlife habitat and native diversity of rare species, as well as the creation of local jobs and valuable wood products.

The Dry Forest Communities Restoration project establishes two fundamental needs for environmental analysis and decision making: focused priorities with design elements and right priorities that support the decision space. Issues and redundant analyses are resolved at the programmatic level. If no management action is taken and off-site vegetation (primarily white pine and Virginia pine) continues to expand into habitats where they are not ecologically appropriate, the desired species composition of these communities would continue to decline. With the decline, resiliency to disturbances including insect and disease, fire, and variations in climate would be reduced making this dry forest community more vulnerable to a wide array of stressors. The proliferation of white and Virginia pine is potentially affecting other resources, including many wildlife species that depend on natural plant communities.

This decision is intended to more fully implement the Revised Land and Resource Management Plan but not exceed goals and objectives by:

- maintain and restore natural communities (Goal 10),
- restore native communities to sites currently occupied by white pine plantation or other sites with minimal diversity (Objectives 17.01 and 17.02),
- reduce the acreage of Virginia pine forest, restore fire-adapted pine or oak communities and restore shortleaf, pitch, or table mountain pine forests (Objective 17.03 and 17.05),
- encourage the reintroduction of extirpated or declining native species, promote forest health, and encourage advanced regeneration of oak species (Objectives 18.01 and 18.02),
- restore and maintain fire associated and dependent landscapes (Goal 23),
- establish appropriate fire return cycles in pine, oak, oak-pine, and pine-oak forests (Objectives 21.01, 21.02, and 21.04),
- reduce hazardous fuels while minimizing fire in mixed mesophytic and northern hardwood forests.(Objectives 24.01 and 24.02).

This decision utilizes current science in the development of the project and the analysis. The project record documents a review of relevant scientific information, consideration of responsible opposing views, and where appropriate, the acknowledgement of incomplete or unavailable information, scientific uncertainty, and risk.

Other Alternatives Considered

Following guidance under 36 CFR 220.7(b)(2) this environmental assessment addresses only those alternatives that meet the need for action. Per these regulations, the no-action alternative is addressed through effects analysis by contrasting the impacts of the proposed action with the current condition and expected future condition if the proposed action were not implemented. The proposed action and those issues

that were identified through internal and external scoping are addressed within the EA, and no additional issues were presented that would lead to another alternative.

220.7 Environmental assessment and decision notice

- 220.7(b)(2) Proposed action and alternative(s). The EA shall briefly describe the proposed action and alternative(s) that meet the need for action. No specific number of alternatives is required or prescribed.
 - (i) When there are no unresolved conflicts concerning alternative uses of available resources (NEPA, section 102(2)(E), the EA need only analyze the proposed action and proceed without consideration of additional alternatives.
 - (ii) The EA may document consideration of a no-action alternative through the effects analysis by contrasting the impacts of the proposed action and any alternatives(s) with the current condition and expected future condition if the proposed action were not implemented.

In many cases a "no action" alternative simply describes what would occur in the absence of any new management, but it useful here to highlight the fact that the proposed action is much more than a continuation of a "business as usual" approach. The current condition of dry forest communities on the Cherokee National Forest is a direct result of existing limitations to management. The purpose of this programmatic decision document is to facilitate the implementation of Forest Plan restoration objectives and the accomplishment of high-priority restoration work in a manner that is both consistent with the Forest Plan and at a higher rate than has been accomplished in the past.

The following alternative was considered but eliminated from detailed study.

Treatment of White Pine Only

An alternative to consider only the effects of off-site white pine was initially considered by the collaborative group and the Forest Service. White pine is very sensitive to fire, and thus is a natural component of the ecosystem primarily in cool, moist sites such as riparian areas and north-facing slopes where natural fire rarely plays a role. It becomes "off-site" when it spreads into dry forest communities in which fire has been suppressed. Virginia pine is likewise quite sensitive to fire effects, thus the two species often are found together encroaching into dry forest communities. Because Virginia pine is an aggressive seeder and capable of rapid growth, an attempt at ecological restoration that only addresses white pine without removing Virginia pine from the same or adjacent areas, would only exacerbate the problem with Virginia pine on the

landscape. Because both of these species lead to the degradation of biodiversity within dry forest communities, addressing only one of them would not be a holistic approach and would not meet the purpose and need of ecological restoration.

Public Involvement

In 2017 the Cherokee National Forest and the Tennessee Chapter of the Nature Conservancy convened a collaborative of key resource management stakeholders to address the implementation of Goal 17. Five working meetings were held between September 2017 and August 2018. During the course of the working meetings, the group realized the context of restoration was greater and widened the focus to include similar off-site species where restoration was needed. The result of the groups effort focused the scope of recommendations on two off-site pine species: white pine and Virginia pine and their occurrence in dry forest communities on the south zone of the Cherokee National Forest.

The Cherokee National Forest South Zone Collaborative (Collaborative) was facilitated by Rob Sutter of Enduring Conservation Outcomes, LLC. Participants included representatives from state and local forestry, state, federal and non-profit wildlife organizations, conservation organizations, and environmental advocacy groups. The Cherokee National Forest was represented on the Collaborative by one individual. Other Forest Service staff provided expertise but were not decision-making members of the group.

Specifically, the Collaborative developed consensus-based recommendations for the Forest regarding how restoration could be done on the south zone of the Cherokee National Forest (Tellico & Ocoee RD's).

In late November 2018 the Collaborative presented the Forest with *Restoration Recommendations for the Management of Off-site Pine in Dry Forest Communities*. The scope of the recommendations focus on two off-site pine species: white pine and Virginia pine including their occurrence in dry forest communities in the south zone of the Cherokee National Forest. Removal of off-site white pine stands will be a large component of the work that needs to be done and will be the highest priority for restoration work.

In February 2019 a scoping letter was initiated. The project is not site specific and addresses restoration needs in dry forest communities including the recommendations across the south zone of the Cherokee National Forest (approximately 300,000 acres project area). The EA was released May 2, 2019 for public review and comment. Four

responses were received. Response to comments are posted to the web and located in the project record.

Finding of No Significant Impact

After considering the environmental effects described in the EA, we have determined that these actions will not have a significant effect on the quality of the human environment considering the context and intensity of impacts (40 CFR 1508.27). Thus, an environmental impact statement will not be prepared. For this programmatic level decision, we base our findings on the following:

- 1) Our finding of no significant environmental effects is not biased by the beneficial effects of the action.
- 2) There will be no significant effects on public health and safety.
- 3) There will be no significant effects on unique characteristics of the area.
- 4) The effects on the quality of the human environment are not likely to be highly controversial.
- 5) We have considerable experience with the types of activities to be implemented. The effects analysis shows the effects are not uncertain, and do not involve unique or unknown risk.
- 6) The action is not likely to establish a precedent for future actions with significant effects.
- 7) The cumulative effects are not significant. The cumulative effects of the proposed actions have been analyzed with consideration of other similar activities on adjacent lands, in past actions, and in foreseeable future actions.
- 8) The action will have no significant adverse effect on districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, because potential earth disturbing activities avoid these areas. All areas proposed for site specific treatment will be subjected to cultural resource inventory and evaluation prior to treatment and a determination of effect will be submitted to the Tennessee State Historic Preservation Office for review, comment, and concurrence. The programmatic decision will not cause loss or destruction of significant scientific, cultural, or historical resources.
- 9) The action will not adversely affect any endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973 (USFWS letter of concurrence dated June 20, 2019).
- 10) The action will not violate Federal, State, and local laws or requirements for the protection of the environment. Applicable laws and regulations were considered in the EA. The action is consistent with the Cherokee National Forest Revised Land and Resource Management Plan.

Findings Required by Other Laws and Regulations

This decision is consistent with the intent of the RLRMP long-term goals and objectives. The project was designed in conformance with land and resource management plan standards and incorporates additional design elements identified in the EA.

It is our finding that the actions of this programmatic decision comply with the requirements of the National Environmental Policy Act (NEPA), and the Council on Environmental Quality.

It is our finding that the actions of this decision comply with the requirements of the National Forest Management Act (NFMA) of 1976, 16 U.S.C. 1604 (g)(3)(E), by following the Forest-wide goals, objectives and standards.

Objection Opportunities

This decision is subject to objection pursuant to 36 CFR 218.5. Objections must meet content requirements of 36 CFR 218.8. The Notice of Objection, including attachments, must be postmarked or received within 45 days after the date the legal notice is published in *The Advocate & Democrat* (Sweetwater, TN), and *Polk County News* (Benton, TN). The objection should be sent to Cherokee National Forest, ATTN: Objections, 2800 Ocoee Street, Cleveland, TN 37312. Objections may be faxed to (423) 476-9791. Hand delivered objections must be received at 2800 N. Ocoee Street, Cleveland, TN within the normal business hours of 8:00 am to 4:30 pm. Objections may also be electronically mailed to: objections-southern-chokeee@fs.fed.us.

All time periods are computed using calendar days, including Saturdays, Sundays, and Federal holidays. However, when the time period expires on a Saturday, Sunday, or Federal holiday, the time is extended to the end of the next Federal working day (11:59 pm). The day after publication of the legal notice of the decision in the newspaper of record (§218.7) is the first day of the objection-filing period. The publication date of the legal notice of the decision in the newspaper of record is the exclusive means for calculating the time to file an objection. Those filing an objection should not rely on date or time information provided by any other source.

As per 36 CFR 218.12, if no objection is received within the legal objection period, this decision may be signed, but not before, the fifth business day following the close of the objection-filing period. If an objection is filed, this decision cannot be signed or implemented until the reviewing officer has responded in writing to all pending objections.

Contact

For further information on this decision, contact Mike Wright, District Ranger, Ocoee/Hiwassee Ranger District, 3171 Highway 64, Benton, TN 37307 or at (423) 338-3300 or Stephanie Bland, District Ranger, Tellico Ranger District, 250 Ranger Station Road, Tellico Plains, TN 37385 or at (423) 253-8400.

Michael A. Wright

District Ranger

Ocoee/Hiwassee Ranger District

Date

STEPHANIE BLAND

District Ranger

Tellico Ranger District

Date

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